

ABSTRACT OF THE INVENTION

In a wireless network system having a wired backbone network, one or more access points (APs), and one or more wireless units (WUs), a technique wherein an AP automatically determines a factor indicative of the error(s) occurring in the transmissions of one or more data packets to associated WUs, and automatically adjust the fragmentation threshold in accordance with the transmission error factor. The AP adjusts the fragmentation threshold in a manner that the data throughput is increased. Since the AP automatically and periodically gauges the wireless medium for RF interference that can cause data transmission errors, the fragmentation threshold can be dynamically adjusted to respond to changes in the wireless medium, such as when a microwave oven is turned on, and/or when a Blue Tooth device is traversing the wireless medium, etc. This is much more effective than having a system administrator periodically gauge the wireless medium for the purpose of selecting the appropriate fragmentation threshold.